

Processing Software Images For Use In Generating Difference Files

ABSTRACT

5 Systems and methods are provided for pre-processing original and new versions
of files as part of difference file generation between the original and new file versions, for
example byte-level file differencing. Software/executable changes between file versions
include primary changes/logical changes, which are defined to be the source code
changes, and secondary changes. The secondary changes generally result from the
10 primary changes and are generated by the software compiler/linker utilities. The
secondary changes include address changes, pointer target address changes, and changes
in address offsets. The pre-processing systems and methods provided use approximation
rules between file versions to remove/reduce the secondary changes and encode
information relating to the removal of these changes in information of the corresponding
15 difference file.